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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,553	12/20/2001	Matthew J. Birdsall	P105 CON 3	6097
28390	7590	11/14/2005	EXAMINER	
MEDTRONIC VASCULAR, INC. IP LEGAL DEPARTMENT 3576 UNOCAL PLACE SANTA ROSA, CA 95403			THALER, MICHAEL H	
			ART UNIT	PAPER NUMBER
			3731	

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/029,553

Applicant(s)

BIRDSALL ET AL.

Examiner

Michael Thaler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-25, 28, 31, 32, 36 and 42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-25, 28, 31, 32, 36 and 42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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The declarations filed on Sep. 28, 2005 under 37 CFR 1.131 are sufficient to overcome the Alt et al. (5,843,117) reference applied to the claims drawn to the embodiment shown in figure 3B.

Claims 20-23, 28, 31 and 42 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sawyer (5,108,417). Sawyer discloses a stent comprising at least one strut having a transverse cross section (e.g. the second of the five sections shown in figure 2, i.e. the section just to the left of the section below arrow A), the transverse cross section having a top substantially flat side (at the top of the section), a bottom substantially flat side (at the bottom of the section), a left substantially curved side (at the left of the section) and a right substantially flat side (at the right of the section). Alternatively, it would have been obvious that the top and bottom sides are "circumferential" as claimed, since they extend along the circumference of the stent. As to claim 21, the strut has a plurality of straight sections (the top and bottom sides which are straight as seen in figure 2) joined by a plurality of crown sections (the left and right sides which are curved as seen in figure 2). As to claim 31, the delivery system described in col. 5, lines 3-11 includes a catheter. As to

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claim 42, the fourth of the five sections shown in figure 2 of Sawyer includes a smooth rounded edge (just slightly to the left of the end of the lead line for reference numeral 140).

Claims 24, 25 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawyer (5,108,417) in view of Wolff (5,104,404). Sawyer fails to disclose a second stent fused to the stent. However, Wolff teaches that a plurality of stents should be fused together in order to obtain the advantages of allowing use of unequal diameter stent segments as the artery diameter changes as well as permitting articulation between adjacent stent segments (col. 1, lines 42-52 and col. 4, lines 43-50). It would have been obvious to provide a plurality of Sawyer stents fused together so that the Sawyer device too would have this advantage.

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sawyer (5,108,417). Sawyer fails to disclose the catheter being a balloon catheter. However, it is old and well known to use a balloon catheter to further expand a self-expanding stent after it has self expanded partially, in order to insure that it expands fully. It would have been obvious to make the Sawyer catheter a balloon catheter so that it too would have this advantage.

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Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Disclosure in view of Alt et al. (5,843,117). Applicant admits that the stent shown in figure 2C of applicant's disclosure is prior art. This shape fails to include a smooth rounded edge between the sides. However, Alt et al. teach that a stent should be machined to round all of its sharp corners in order to facilitate easy movement of the stent through the blood vessel and prevent damage to the blood vessel or balloon (col. 6, lines 31-45, col. 14, lines 60-62 and col. 15, lines 16-18). It would have been obvious to round the corners of the prior art stent shown in figure 2C of the application so that it too would have these advantages. Note that this claim is drawn only to the embodiment shown in figure 3A since the embodiment of figure 3B has curved left and right sides but does not have a smoothly rounded edge joining the bottom and left sides, for example. Note also that the declarations filed on Sep. 28, 2005 under 37 CFR 1.131 are insufficient to overcome the Alt et al. (5,843,117) reference applied to any claim drawn to the embodiment shown in figure 3A since the declarations refer to substantially curved left and right sides which are present in figure 3B but not in figure 3A.

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Applicant's arguments filed Sep. 28, 2005 have been fully considered but they are not persuasive for the reasons set forth above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Thaler whose telephone number is (571)272-4704. The examiner can normally be reached Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan T. Nguyen can be reached on (571)272-4963. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

mht
11/7/05



MICHAEL THALER
PRIMARY EXAMINER
ART UNIT 3731